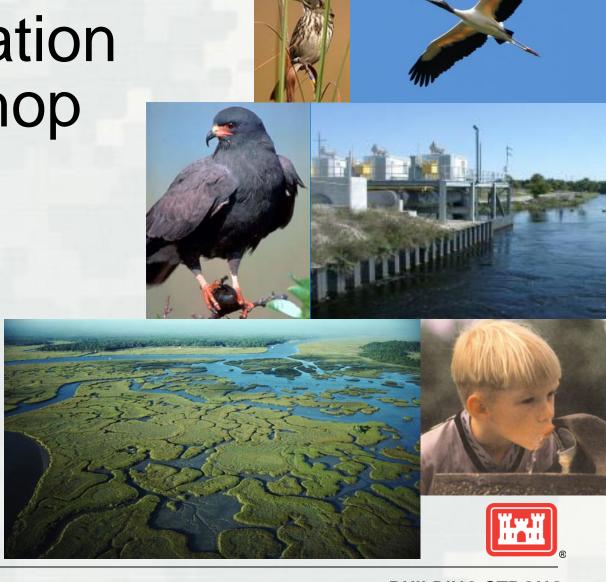
South Dade Investigation Workshop

September 3, 2015 West Palm Beach, Florida

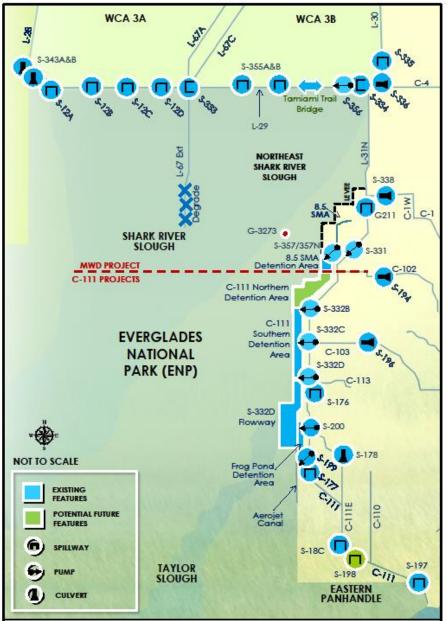


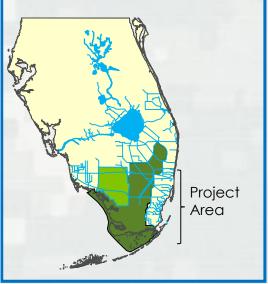


MWD Increment 3 Combined Operational Plan (COP)









Existing Features
Potential Future
Features
Structures and
Pumps

C&SF STRUCTURES
RELEVANT
TO THE COMBINED
OPERATIONAL PLAN





Increment 3 - Purpose

- Define operations for the constructed features of the MWD and Canal-111 South Dade projects
 - considering implementation constraints within the Central and Southern Florida (C&SF) Project
 - identifying opportunities for flexibility in water management
- Maintain the Congressionally-authorized multiple purposes of the C&SF Project
 - flood control
 - water supply for municipal, industrial, and agricultural uses
 - prevention of saltwater intrusion
 - water supply for Everglades National Park
 - protection of fish and wildlife





- Revise WCA/ENP/SDCS Water Control Plan (Vol. 4) to include
 - Constructed features of MWD and C-111 South Dade Projects
 - WCA-3A Rainfall Plan updates
 - Additional 2.6 miles of bridges on Tamiami Trail and raising of TTM roadway
 - Eliminated or constrained Column 2 operations
- Formulation efforts will be informed by information obtained from
 - Increment 1 and Increment 2 field tests
 - Receipt of NEPA Scoping comments
- Anticipate Phased Implementation of operations
 - Public Coordination expected to begin XXXX





	Out Nov Dec Jan Feb Mar Apr May Jan Jul Aug Sep Out Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Out 1									eo Jan Peb Ma	r Apr May Ju	a Jul Aug Sep	Oct Nor Dec Jan Feb Mar Ape May Jun Jul Aug Sep-				Oct Nov Dec	Jan Feb Mar	Apr May Jun	Jul Aug Sep	Out Nov Dec Jan Feb Mar Age May Jun Jul Aug Sep				Oct Nov Dec	Jan Peb Mar
Task	FY 2014				FY 2015					FY	2016	FY 2017				FY 2018				FY 2019				FY 2020		
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarte	r 2nd Quarte	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter
8.5 SMA										SMA CON MODIFIC	ATIONS															
Tamiami Trail Modifications	Construction Complete ID Turnover Requirement				ts Title Work/Surveys/Final Maps				ps	TTM Bridge Char Flowage Easer	wap, Conveyance of RW, Easements*					TTM Close Out										
ERTP BO	ERTP BO - Expires 1 Jan 2016 / FWS Consultation / BA draft B								вО	0																
Property Easements	Acquisition of AAoF Real Estate Interest (USACE) /Flowage Easements for DOI properties *												Cure for Salem Communications, FPL, Cooper Town, Everglades Safari, Gator Park and Financial Radio Tower and complete NEPA document (DOI)													
S-356 Pump Test		Develop Pump Yest Cittledia and 21-Day Yest				pairs: P&S, Contract, Begin Work																				
Increment 1: G-3273 and S-356		Test with A	Initiation of gencies and Analysis		273, S356, S357N Test pment; associated NEPA					m 1st increme lysis and Peri adjustr	odic operatio					Test Firei	,									
C-111 SD Contract 8					Revi	Revise P&S Contract 8 Advertise Award				Const	ruction of	f Contract 8 (Estimate)														
C-111 SD Contract 9							Se			gn, Permit ntract 9a"		Advertise Award	Cons	struction of	f Contract	9a** (Est	imate to c	omplete)								
Increment 2: L-29 with G-3273 and 8-356						South Dade Investigation Study							Mo	evelop GO onitoring P crement; N	lan and N	IEPA for 2	2nd	Perform 2nd i Analysis a	ncrement - 1 nd periodic a		Test Sivel Rpt	WCP Revisions				
Increment 3: Revise WCP													Scope a					""Operating Plan Development - incorporate 1st increment test results and 2nd increment development information.					Duration dependent on Scope 14 Months			

^{*} ALL EASEMENTS MUST BE ACQUIRED PRIOR TO BEGINNING 2nd INCREMENT/ 2nd INCREMENT MAY CONTINUE UNTIL INTIATION OF OPERATING PLAN

[&]quot; FEATURES NEEDED FOR FULL IMPLEMENTATION OF INCREMENT 2

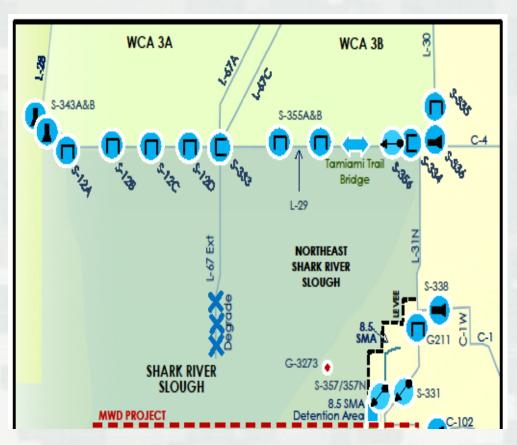
^{***} ONE YEAR OF 2nd INCREMENT TESTING NEEDED PRIOR TO INITIATION OF INCREMENT 3: REVISION OF WCA/ENPISDCS WCP (Vol. 4)

Modified Waters Deliveries to Everglades National Park (MWD) Project





MWD Project Features and Status



Project Features

- S-355A&B (L-29): Complete
- S-333 Modification: Complete
- S-356 (L-31N): Complete
- Tamiami Trail Modifications:
 Complete
- L-67 Extension: 4 of 9 miles
 Complete
- 8.5 Square Mile Area Perimeter
 Levees and Pump Station: Complete
- S-357N: To be constructed
- Tigertail Camp: Complete

Other Project Activities

- Increment 0 (Pump Test)
- Increment 1 (G-3273 Relaxation and S-356 Field Test)
- Increments 2 and 3 (COP)



MWD Project Objectives

Take steps to restore the natural hydrologic conditions within Everglades National Park, to the extent practicable.

- <u>Timing:</u> Changing the schedule of water deliveries so that it fluctuates in consonance with local meteorological conditions, including providing for long term and annual variation in ecosystem conditions in the Everglades;
- Location: Restoring WCA-3B as a functioning component of the Everglades hydrologic system* and restoration of water deliveries to Northeast Shark River Slough the center of the historic Shark River Slough; (*modified by CEPP – ROD signed 8/31/2015)
- Volume: Adjusting the magnitude of water discharged to Everglades National Park to minimize the effects of too much or too little water.





Canal-111 South Dade (C-111 SD) Project





C-111 SD Project Objectives

- Restoration of historic hydrologic conditions in the C-111 Basin.
- Protection of natural values associated with Everglades National Park
- Elimination of damaging freshwater inflows to Manatee Bay/Barnes Sound
- Maintain flood protection for the C-111 Basin, east of L-31N and C-111.





C-111 SD Project Features and Status



Detention Areas and Levees

- C-111 Northern Detention Area: Award
 30 Sep 15
- C-111 Retention/Detention Area: Complete
- Internal Flowway berms: Award 30 Sep 16
- Modification to S-360 weirs: Award 30 Sep 16
- Richmond Dr. Modifications: Award 30 Sep 16

Pump Stations

- Interim S-332B: Complete
- Interim S-332C: Complete
- S-332D: Complete

Bridge

Taylor Slough Bridge: Complete

Backfilling

- C-109 Backfilling: Complete
- C-111 Spoil Mound Removal: Complete
- L-31W Backfilling: Award TBD
- Modification to S332D Flowway:
 Award TBD





Increment 1 G-3273 Relaxation and S-356 Field Test L-29 Canal at 7.5 feet NGVD





MWD Increment 1 field test is a two-year Planned Deviation to the 2012 WCA, ENP, and SDCS Water Control Plan

- ► Raises G-3273 constraint of 6.8 feet NGVD and tests S-356 PS
- ▶ L-29 Canal maximum operating stage remains at 7.5 feet NGVD
- ► Testing protocol to define operating criteria for S-357N

OBJECTIVES

- ▶ Improve hydrological conditions in NESRS through the relaxation of the G-3273 stage criteria to increase water deliveries from WCA 3A to NESRS, while maintaining other C&SF Project authorized purposes.
- ▶ Use the S-356 pump station to return seepage to NESRS and manage seepage from NESRS to the L-31N Canal resulting from the relaxation of the G-3273 stage constraint on S-333, in conjunction with increased flows through the S-333 spillway to NESRS via the L-29 Canal.
- ► Improve hydrological conditions in NESRS by maximizing the flexibility and efficiency of the existing infrastructure, including use of seepage management (e.g., S-356) to complement inflows to NESRS from WCA 3A.



- OBJECTIVES continued
 - ► Gather and analyze infrastructure performance, ecologic, hydrologic and water quality data sufficient to support Increment 2, resulting in the following:
 - Data gathering sufficient to support water quality certification
 - Refined operational criteria for the MWD and C-111 South Dade Projects
 - Updates to the 2012 Water Control Plan
- Timeline
 - Test Period
 - Depends on completion of Increment 0 (Mechanical Testing)
 - Will initiate when hydrologic conditions allow for relaxation of G-3273 above 6.8 ft NGVD consistent with the objectives of this field test.
- Outcome
 - Interim Operating Criteria





Increment 2 G-3273 Relaxation and S-356 Field Test L-29 Canal up to 8.5 feet NGVD





Increment 2

- Raises G-3273 constraint and tests S-356 with the L-29 Canal maximum operating stage raised (up to 8.5 ft NGVD)
- Operation of 8.5 SMA S-357N
- Use of C-111SD constructed features
- Additional structures/components may be included
- Dependent on acquisition of TTM RE Interests

Outcome

- Revisions to WCP (1st Increment)
- Interim Operating Criteria





South Dade Investigation

- Interested in the information coming from this series of workshops
 - Provide additional information on Agency and stakeholder concerns with south Dade operations
 - ► Assist in the development and future implementation of Increment 2 Operational Strategy and Monitoring Plan
 - ▶ Provide understanding of Agency/Stakeholder vision for increments 2 and 3
 - May aid to identify book ends for adaptively managing test operations

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Real Estate - Locations

